



AUSTRALIAN OWNED



AUSTRALIAN MADE





When it comes to insulated, fire rated & architectural panel systems one name stands out . . .



www.australinsulation-vic.com.au



Conforms to high fire resistance standards Insurer Approved

- FM Global Class 1
- BCA Group 1
- Fast installation
- Lightweight superior spanning capacity
- Excellent energy efficiency ratings -R-values up to 8.06
- Cost efficient to install & maintain
- BlueScope Steel Colorbond® range of designer colours
- Permagard™ White in Microban® for antibacterial protection
- Meets AQIS food industry standards

**PRODUCT INFORMATION** 

MELBOURNE PERTH BRISBANE

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## Description

- XFLAM™ panels are a lightweight composit building system.
- The system comprises of two sheets of Colorbond® steel, XFLAM™ core and bonded by special adhesives.
- Panels are formed with the Austral Slip-joint® enabling effective and easy installation.

# **Fire Safety Performance**

BRANZ: ISO 9705 - exceeds 20mins which is the requirement for Group 1 Australian Building Code.

Factory Mutual: Meets fire resistance requirements of FM Global Class 1 (4880)

"Subject to the conditions of Approvals as a Class 1 insulated wall & ceiling panel when installed as described in the current edition of the FM Approval Guide."

#### **Panel Specifications**

Width	Core	Length	U-Value	Max. Skin Temp.	Adhesive	Finish
1200mm cover	XFlam™	Cut to order	0.031 W/M/K	100°C	Thermosetting	Flat,
		Min. 1000mm		Dry Heat	two part mix of	100mm Rib,
		Max. 18000mm		Sustained	Polyurethane.	50mm Mesa Rib,
					CFC Free	Silkline.

## **Panel Skin**

	Finish	Thickness	Metal	Colour
Со	lorbond®	0.60mm (BMT)	BlueScope Steel Zinc coated with a corrosion inhibitive primer baked onto surface with durable top coat.	Classic Cream, Surfmist, Paperbark, Dune, Shale Grey, Deep Ocean and Pale Eucalypt plus 3 Metallics and Permagard™ White

Colorbond® Permagard™ steel has been successfully designed with antibacterial properties which provide excellent benefits across many applications. Non-standard metals, colours and paint types may be negotiated subject to quantity and time considerations.

## **Panel Properties**

Thickness (mm)	50mm	75mm	100mm	150mm	200mm	250mm			
Weight (kg/m²)	12.9	13.8	14.8	16.7	18.6	20.5			
R-Value (m <sup>2</sup> KW)	1.61	2.42	3.23	4.84	6.45	8.06			
Compressive Strength	230 N/mm <sup>2</sup>								
Cross Breaking Strength	350 N/mm <sup>2</sup>								
Peel Strength	91.3 N/mm <sup>2</sup>								
Core Density	38 kg/m <sup>3</sup>								

#### Panel Span in Metres

Tuner Spun in Metres															
DESIGN LOAD CAPACITY Steel Thickness 0.60mm															
Nominal Panel Thickness		Ultimate Limit State Uniform Design Load Capacity kN/sqm													
	Single Span - Length in metres														
(mm)	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	9.0	
50	3.0	2.40	2.00	1.71	1.50	1.19	0.96	0.79	0.67	0.57	-	-	-	-	
75	4.54	3.63	3.03	2.59	2.27	1.79	1.45	1.20	1.01	0.86	0.74	0.65	0.57	0.45	
100	6.07	4.86	4.05	3.47	3.04	2.40	1.94	1.61	1.35	1.15	0.99	0.86	0.76	0.60	
150	9.14	7.31	6.09	5.22	4.57	3.61	2.92	2.42	2.03	1.73	1.49	1.30	1.14	0.9	
200	10.9	8.72	7.27	6.23	5.45	4.31	3.49	2.88	2.42	2.06	1.78	1.55	1.36	1.08	
250	13.7	10.9	9.13	7.82	6.80	5.37	4.35	3.6	3.02	2.58	2.22	1.93	1.70	1.34	

Notes:

- The tabulated design loads are factored maximum design loads. (In the assessment of the design loads, the designer should take into account the self weight of the XFLAM™ panel).
- Compliance with these recommendations will ensure that deflections do not exceed span / 90 to the left of the dark shading and span / 150 to the left of the light shading. Where more severe deflection restrictions are required, specific testing of deflection characteristics is recommended for the various span / thickness combinations.
- A minimum design load of 0.75 kN / m<sup>2</sup> is recommended for general applications. Design loads below the lightly shaded area satisfy Serviceability Limits on deflections. Circumstances may require different design loading.
- Where panels are continuous across a support, it is recommended that stress cuts be made across the inside (or cold side) steel skin adjacent to the supports to prevent buckling of the outer (warm side) skin at the support. Fixings should be provided on both sides of the stress cut.

